

**REMARKS**

Upon entry of the present Request for Continued Examination, including the amendments made herein, claims 1-4, 9-14, 19-21 and 23-24 will be pending, of which claims 1, 14, 19 and 23 will have been amended and claims 15, 16, 22 and 25 will have been canceled (in addition to previously canceled claims 5-8 and 17-18) without prejudice or disclaimer of the subject matter claimed therein in order to expedite prosecution. However, Applicants submit that the amendments should not be construed as admissions to the propriety of the Examiner's rejection. Applicants respectfully submit that pending claims 1-4, 9-14, 19-21 and 23-24 are now in condition for allowance. Applicants respectfully submit that the amendments contained herein are in conformance with the originally filed disclosure and do not constitute new matter.

Claims 1-4, 9-14, 19-21 and 23-24 are rejected under 35 U.S.C. § 103(a) based on eight separate grounds of rejection. In particular, claims 1 and 17<sup>1</sup> are rejected under §103 as being unpatentable over MASAND et al. (U.S. Pat. No. 5,251,131) and WHITE et al. (U.S. Pat. No. 5,933,490) in view of MIZUNO (U.S. Pat. No. 5,577,166). Claims 2 and 4 are rejected under §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of TAN et al. (an article entitled, "Learning User Profiles for Personalized Information Dissemination"). Claim 3 is rejected under §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of TAN2 (an article entitled, "Cascade ARTMAP: Integrating Neural Computation and Symbolic Knowledge Processing"). Claims 9 and 10 are rejected under §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of ALAM et al. (U.S. Pat. No. 6,104,500). Claims 11, 12 and 16 are rejected under §103 as being

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<sup>1</sup> Applicants note that claim 17 was canceled by the Amendment filed January 16, 2007.

unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of REGISTER et al. (U.S. Pat. No. 5,371,807). Claims 13-15 are rejected under §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of GLIER et al. (U.S. Pat. No. 5,479,574). Claims 19 and 20 are rejected under §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of SALGADO (U.S. Pat. No. 5,777,882). Claims 21-25 are rejected under §103 as being unpatentable over MASAND et al., WHITE et al., MIZUNO and SALGADO in view of GLIER et al. Applicants respectfully traverse all grounds of rejection, at least for the reasons provided below, and request reconsideration and withdrawal of the same, and further request an indication of allowability of all pending claims in the next Official correspondence.

Applicants respectfully traverse the rejection of claim 1 under 35 U.S.C. §103 as being unpatentable over MASAND et al. and WHITE et al. in view of MIZUNO. Further, the rejection of claim 17 is moot since the claim was canceled without prejudice or disclaimer of the subject matter by the Amendment filed January 16, 2007. Upon entry of the present Amendment, claim 1 will have been amended to incorporate recitations from claims 13, 15 and 22, of which claim 22 will have been canceled upon entry of this Amendment. Assuming *arguendo* that the references are combinable (which Applicants submit that they are not for reasons discussed below), Applicants submit that MASAND et al., WHITE et al. and MIZUNO, whether taken alone or in any proper combination do not teach or suggest, *inter alia*, at least one of a misrouted document being sendable to a correct destination by a manual routing and the classifier being switched to the knowledge acquisition mode when a document has been determined to be misrouted,

and wherein a rule insertion being performable in the knowledge acquisition mode in which a plurality of features are input by a user to the classifier together with a classification with which the features are associated, as recited in claim 1. Furthermore, one of ordinary skill in the art would not have been motivated to combine MASAND et al., White et al. and MIZUNO.

MASAND et al. are directed to a classification system for classifying data records by comparison of records to a training database using probability weights. MASAND et al. teach a "piecemeal approach" to constructing a Training Database (*see e.g.*, column 29, line 63 *et seq.*). A review of the MASAND et al. patent reveals that MASAND et al. train the Training Database (TDB) 80 in a batch mode. *See e.g.*, column 29, line 63 to column 30, line 39. Particularly, MASAND et al. process a database of documents in order to train a classification model, which they then uses to classify documents. In MASAND et al., the "piecemeal approach" refers to a batch processing of all the records in the database to consider each feature in piecemeal fashion. However, MASAND et al. do not teach or suggest, *inter alia*, at least one of a misrouted document being sendable to a correct destination by a manual routing and the classifier being switched to the knowledge acquisition mode when a document has been determined to be misrouted, and wherein a rule insertion being performable in the knowledge acquisition mode in which a plurality of features are input by a user to the classifier together with a classification with which the features are associated, as recited in, e.g., independent claim 1.

At page 4 of the Final Official Action, the Examiner concedes that "MASAND does not teach wherein the threshold is adjustable to match a desired confidence value

to allow transition from a state where manual routing is favored to a state that favors automatic routing." Further, at page 2 of the Final Official Action, the Examiner concedes that a combination of MASAND et al. and WHITE et al. "do not teach the classifier being switchable between the modes under user control." The Examiner provides WHITE et al. as a secondary teaching and MIZUNO as a tertiary teaching, proffering that WHITE et al. teach an adjustable threshold to match a desired confidence value to allow transition from a state where manual routing is favored to a state that favors automatic routing, and MIZUNO teaches a classifier being switchable between the modes under user control. However, Applicants submit that neither WHITE et al. or MIZUNO teach what MASAND et al. lack, e.g., at least one of a misrouted document being sendable to a correct destination by a manual routing and the classifier being switched to the knowledge acquisition mode when a document has been determined to be misrouted, and wherein a rule insertion being performable in the knowledge acquisition mode in which a plurality of features are input by a user to the classifier together with a classification with which the features are associated, as recited in, e.g., claim 1.

WHITE et al. teach overload protection for on-demand access to the Internet that redirects calls from overloaded Internet service providers (ISP) to alternate Internet access providers. In this regard, WHITE et al. teach using Advanced Intelligent Network (AIN) triggers to cause a program controlled switch to initiate a query to a remote database (see e.g., column 14, line 7 *et seq.*). The remote database may include current parameter values (such as, for example, "call rate," "busy rate," "quick disconnect rate," "call wait," or "call duration" as shown in FIG. 10) and thresholds (such

as, for example, "exceed high threshold," "exceed combination thresh.," etc., as shown in FIG. 10). WHITE et al. do not teach or suggest, alone or in any proper combination, *inter alia*, at least one of a misrouted document being sendable to a correct destination by a manual routing and the classifier being switched to the knowledge acquisition mode when a document has been determined to be misrouted, and wherein a rule insertion being performable in the knowledge acquisition mode in which a plurality of features are input by a user to the classifier together with a classification with which the features are associated, as recited in claim 1.

Further, MIZUNO is directed to a method and apparatus for classifying patterns by use of neural networks, and in particular to classifying patterns in stock market data. In this regard, MIZUNO discloses a control processing module that displays a guidance image on a screen of a display to request a user to input an instruction for execution of training or classification. The control module then receives, via a keyboard, an instruction from the user. (See e.g., column 6, lines 13-15.) MIZUNO, however, does not teach or suggest, alone or in any proper combination, *inter alia*, at least one of a misrouted document being sendable to a correct destination by a manual routing and the classifier being switched to the knowledge acquisition mode when a document has been determined to be misrouted, and wherein a rule insertion being performable in the knowledge acquisition mode in which a plurality of features are input by a user to the classifier together with a classification with which the features are associated, as recited in, e.g., claim 1.

Thus, Applicants submit that MASAND et al., WHITE et al. and/or MIZUNO, whether taken alone or in any proper combination, do not teach or suggest, *inter alia*, at

least one of a misrouted document being sendable to a correct destination by a manual routing and the classifier being switched to the knowledge acquisition mode when a document has been determined to be misrouted, and wherein a rule insertion being performable in the knowledge acquisition mode in which a plurality of features are input by a user to the classifier together with a classification with which the features are associated, as recited in, e.g., independent claim 1.

Further, Applicants submit that one of ordinary skill in the art would not have been motivated to combine MASAND et al., WHITE et al. and MIZUNO since MASAND et al. and MIZUNO are directed to classification systems and WHITE et al. are directed to overload protection for on-demand access to the internet that redirects calls from overloaded internet service providers to alternate internet access providers. Particularly, MASAND et al. are directed to a system for classifying natural language data and MIZUNO is directed to classifying an input pattern using a neural network. On the other hand, WHITE et al. are directed to a system for automatically and dynamically redirecting telephone calls in a public telephone network. Applicants submit that one of ordinary skill in the art would not have attempted to combine MASAND et al. and MIZUNO with the non-analogous system of WHITE et al. for the above-noted teaching of WHITE et al. relied on by the Examiner. Moreover, Applicants submit that any attempt at combining the teachings of MASAND et al., WHITE et al. and MIZUNO would have resulted in a system with no expectation of success. Since there is a lack of any motivation to combine the teachings of MASAND et al., WHITE et al. and MIZUNO, the Examiner has failed to establish a *prima facie* case of obviousness.

Accordingly, because any proper combination of MASAND et al., WHITE et al. and MIZUNO would not teach or suggest every element of independent claim 1, in addition to there be a lack of motivation to combine MASAND et al., WHITE et al. and MIZUNO, reconsideration and withdrawal of the rejection of claim 1 under § 103(a) based on MASAND et al., WHITE et al. and MIZUNO is respectfully requested.

Furthermore, regarding the Examiner's statement in the Advisory Action mailed June 1, 2007 that claims 13, 15 and 22 "were covered with 'Glier' so now claim 1 is covered with the combination of Masand, White, Mizuno and Glier," Applicants strenuously disagree and traverse the Examiner's statement. Applicants submit that the following, *inter alia*, each of which is recited in independent claim 1, are not found or suggested by any one of MASAND et al., WHITE, MIZUNO, or GLIER et al., or any proper combination thereof: (1) incremental knowledge acquisition, (2) a classifier that is switchable between an incremental knowledge acquisition mode and a document classification mode for each document, and (3) misrouted documents being sendable to a correct destination by manual routing. Applicants add that GLIER et al. too, whether taken alone or in any proper combination, do not teach or suggest the above, each of which is recited in, e.g., claim 1.

For example, GLIER et al. teach a neural network and method for pipeline operation within a neural network which permits rapid classification of input vectors provided thereto. In GLIER et al., a user may decide to reorder a training set and attempt to learn it again. See, e.g., column 14, lines 50-58 in GLIER et al. Clearly this relates to an initial batch learning process and the decision of when the system is ready to begin classifying. Applicants submit that GLIER et al. do not provide any disclosure

of isolating an incorrectly classified/routed document since classification has not yet started. Additionally, Applicants submit that since GLIER et al. remain in a knowledge acquisition mode, GLIER et al. do not teach or suggest switching to a knowledge acquisition mode.

Thus, Applicants submit that even if one were to combine MASAND et al., WHITE et al., MIZUNO and/or GLIER et al., as suggested in the Examiner's Advisory Official Action (which, Applicants submit that one of ordinary skill in the art would not have been motivated to do), any proper combination of MASAND et al., WHITE et al., MIZUNO and/or GLIER et al. would not teach or suggest every element of independent claim 1.

Regarding the rejection of claims 2 and 4 under §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of TAN et al., Applicants respectfully traverse this rejection. TAN et al. was relied on in the rejection only to teach a supervised adaptive resonance theory (ART) system. Therefore, Applicants submit that TAN et al. do not cure the noted-above deficiencies of MASAND et al., WHITE et al. and MIZUNO, and that the rejection of claims 2 and 4 should be reconsidered and withdrawn in the next Official communication.

Regarding the rejection of claim 3 under 35 U.S.C. §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of TAN2, Applicants respectfully traverse this rejection. Initially, Applicants note that claim 3 depends from claim 2 and that the rejection of claim 2 under 35 U.S.C. § 103 based on MASAND et al., WHITE et al. and MIZUNO, without TAN et al. is *prima facie* improper and should be withdrawn. Notwithstanding the clear impropriety of the rejection, TAN2 was relied



on in the rejection only to teach an ARTMAP system. Therefore, Applicants submit that TAN2 does not cure the noted-above deficiencies of MASAND et al., WHITE et al. and MIZUNO, and that the rejection of claim 3, which is *prima facie* erroneous, should be reconsidered and withdrawn in the next Official communication.

Regarding claims 9 and 10, they are rejected under 35 U.S.C. §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of ALAM et al. (U.S. Pat. No. 6,104,500). ALAM et al. were relied on in the rejection only to teach that features may be formed into a feature vector, that one of a plurality of destinations may be a system administrator workstation and that a router may be arranged to route a document for manual routing after a manual routing decision. Therefore, Applicants submit that ALAM et al. do not cure the noted-above deficiencies of MASAND et al., WHITE et al. and MIZUNO, and that the rejection of claim 3 should be reconsidered and withdrawn in the next Official communication.

Regarding the rejection of claims 11 and 12 (claim 16 having been canceled upon entry of this Amendment) under 35 U.S.C. §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of REGISTER et al., Applicants respectfully traverse this rejection. REGISTER et al. were relied on in the rejection only to teach classification associated with words or phrases that may appear in a document. Therefore, Applicants submit that REGISTER et al. do not cure the noted-above deficiencies of MASAND et al., WHITE et al. and MIZUNO, and that the rejection of claims 11 and 12 should be reconsidered and withdrawn in the next Official communication.

Regarding the rejection of claims 13-14 (claim 15 having been canceled upon entry of this Amendment) under 35 U.S.C. §103 as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of GLIER et al., Applicants traverse this rejection. GLIER et al. were relied on in the rejection to teach a system administrator work station to which other destinations are connected, which provides for manual classification by a system administrator. Applicants submit that GLIER et al. do not teach or suggest, *inter alia*, misrouted documents being sendable to the correct destination by manual routing. Therefore, Applicants submit that GLIER et al. do not cure the noted-above deficiencies of MASAND et al., WHITE et al. and MIZUNO, and that the rejection of claims 13 and 14 should be reconsidered and withdrawn in the next Official communication.

Regarding the rejection of claims 19 and 20 under 35 U.S.C. §103(a) as being unpatentable over MASAND et al., WHITE et al. and MIZUNO in view of SALGADO, Applicants traverse this rejection. Applicants respectfully submit that MASAND et al., WHITE et al. and MIZUNO in view of SALGADO, whether taken alone or in any proper combination, fail to teach or suggest, *inter alia*, at least one of a misrouted document being sendable to a correct destination by a manual routing and the classifier being switched to the knowledge acquisition mode when a document has been determined to be misrouted, and wherein a rule insertion being performable in the knowledge acquisition mode in which a plurality of features are input by a user to the classifier together with a classification with which the features are associated, as recited in claim 19.

Applicants note that they have shown the above recitations of claim 19 to be patentably distinguishable over any proper combination (Applicants submit that it MASAND et al., WHITE et al. and MIZUNO are not combinable) of MASAND et al., WHITE et al. and MIZUNO in their discussions provided above with regard to, for example, independent claim 1. Applicants further add that SALGADO was relied on in the rejection only to teach a router operable in one of an automatic or manual mode to route a document to at least one of a plurality of destination and an adjustable threshold. Therefore, Applicants submit that SALGADO does not cure the noted-above deficiencies of MASAND et al., WHITE et al. and MIZUNO, and that the rejection of claims 19 and 20 should be reconsidered and withdrawn in the next Official communication.

Regarding the rejection of claims 21 and 23-24 (claims 22 and 25 having been canceled upon entry of this Amendment) under 35 U.S.C. §103 as being unpatentable over MASAND et al., WHITE et al., MIZUNO and SALGADO in view of GLIER et al., Applicants respectfully traverse this rejection. GLIER et al. were relied on in the rejection to teach a system administrator workstation coupled to the feature extractor and classifier, switching the classifier to a knowledge acquisition mode, and the system administrator classifying an object. However, GLIER et al. fail to remedy the deficiencies found in MASAND et al., WHITE et al., MIZUNO and SALGADO. Applicants submit that, for example, GLIER et al. do not teach or suggest, *inter alia*, misrouted documents being sendable to the correct destination by manual routing. Therefore, Applicants submit that GLIER et al. do not cure the noted-above deficiencies of MASAND et al., WHITE et al., MIZUNO and SALGADO, and that the rejection of

claims 21 and 23-24 should be reconsidered and withdrawn in the next Official communication.

Since claims 2-4, 9-14, 20-21 and 23-24 depend from claims 1 and 19 and are patentably distinguishable for at least the reasons provided above with respect to claims 1 and 19, as well as for additional reasons related to their own recitations, Applicants respectfully request the reconsideration and withdrawal of the Section 103 rejections of claims 2-4, 9-14, 20-21 and 23-24, and an indication of the allowability of claims 2-4, 9-14, 20-21 and 23-24 in the next Official communication. Thus, Applicants respectfully request allowance of this application to mature into U.S. patent, including claims 1-4, 9-14, 19-21 and 23-24.

For at least the reasons set forth above, all of the pending claims are submitted to be in condition for allowance. Thus, Applicants respectfully request withdrawal of all rejections and timely allowance of all of the pending claims.

**SUMMARY AND CONCLUSION**

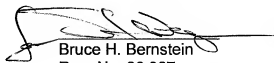
In view of the foregoing, it is submitted that the rejections under 35 U.S.C. §103(a) in the Final Official Action dated March 15, 2007, should be withdrawn. The present Amendment is in proper form, and none of the references teach or suggest Applicants' claimed invention. Accordingly, Applicants respectfully request timely allowance of the present application.

Applicants note that this Amendment is being made to advance prosecution of the application to allowance, and no acquiescence as to the propriety of the Examiner's rejections is made by the present Amendment.

Should an extension of time be necessary to maintain the pendency of this application, the Commissioner is hereby authorized to charge any additional fee to Deposit Account No. 19-0089.

Should there be any questions regarding this paper or the present application, the Examiner is respectfully requested to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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